

December 2, 2015

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The Nevada Cannabis Laboratory Association (NVCLA) was formed to ensure the uniformity, consistency, reliability, reproducibility, quality, and integrity of scientific testing according to the Nevada state regulations. On behalf of member laboratories, the NVCLA would like to make a recommendation regarding reporting of cannabinoids.

A wide variety of methods have been employed across the United States and across Nevada when reporting cannabinoid content. These variations lead to confusion in the reported values and make it very difficult to compare products, let alone laboratory results.

Variations include:

1. Reporting on a dry weight basis vs. an as-received weight basis.
2. Reporting individual components only vs. summations.

The tables below show potential variations for how data can be reported simply based on a theoretical moisture content of 12%.

Cannabinoid	Wt % (Dry)	Wt. % (As Received)
THC	0.54	0.49
THCA	17.71	15.94
CBD	0.10	0.09
CBN	0.00	0.00

Totals	Wt. % (Dry)	Wt. % (As Received)
"Total THC" = THC + THCA	18.25	16.43
"Total Potential THC" = THC + 0.877 x THCA	16.07	14.47
"Total Cannabinoids"	18.35	16.52

Discussion:

1. **The NVCLA recommends reporting on an as-received basis.** Even though reporting by dry weight shows an “increase” in the amount of cannabinoids present, this is not consistent with how the customer will be purchasing the product. The end-user will not be purchasing a completely dry product, and as-received by the lab will be the closest to what the final customer will be purchasing. Also, all other reported measurements (terpenes, metals, microbiology) are also all reported on an as-received basis, and this makes for a consistent reporting method.
2. **The NVCLA recommends that labs specifically declare on the report that results are reported on an “as-received” basis.** The declaration on the report will make it clear as to the reporting method.
3. **The NVCLA recommends only reporting the individual cannabinoids measured. The NVCLA does not recommend reporting any of the various summation methods.** The various summation methods (Total THC, Total Potential THC, Total Cannabinoids, etc.) are holdovers from when gas chromatography was often used for the analysis and artificially converted the THCA to THC, and it was not possible to measure THCA. Current methods allow for accurate quantitation of THCA (and other acid species), and these summation methods are not required. In addition, some patients are looking specifically for THCA content, and reporting Total THC or Total Potential THC does not give this information.
4. **The NVCLA recommends that DPBH set an industry-wide standard for product labeling.** Without a standard method, it will be impossible to compare products and will lead to confusion for the industry and for consumers.

While the NVCLA recognizes that the reporting of “Total THC” is an attempt to compare data to older methods, Nevada has the opportunity to clarify this confusion and standardize reporting methods.

Sincerely,



James Dean Leavitt

President, NVCLA